Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

into a mountain scrub, consisting chiefly of stunted rata. The Auckland Islands have also extensive meadows and bogs. The paper closes with an account of the important influence played by animals upon the vegetation.

The plant formations of Campbell Island are described by R. M. LAING. This island contains no trees, the tallest vegetation being the *Dracophyllum* scrub; the treelessness is ascribed to the violent westerly gales. Apart from the scrub, Campbell Island has interesting tussock meadows. Some of the geological papers will interest botanists. The zoological papers are of interest chiefly to taxonomic specialists in the groups concerned.—H. C. COWLES.

The geographic botany of Belgium

MASSART'S long years of patient study in every part of Belgium have made possible the publication of a splendid treatise on the flora of the country from the standpoint of phytogeography.[6] His previous monograph on the dune vegetation of Belgium is still fresh in the minds of phytogeographers, and the work here noticed is all the more welcome because of the excellent impression made by the earlier volume. This splendid work is dedicated to the memory of ERRERA, and copies were presented to the members of the botanical congress at Brussels. In the introduction the author sets forth his views concerning the methods and purposes of geographic botany, and shows how greatly the methods of ecological geography differ from those of floristic geography. Interesting remarks are made on the relations of "accommodation" to the composition of plant associations.

The first chapter deals with the geology of Belgium, and the second with climate and soil. As is well known, much of the country is of very recent origin, so recent, in fact, that historical records are available as to many points. Under the caption climate there is considered the bearing of various phenological data. The third chapter presents the chief kinds of plant associations that are represented in Belgium. The great density of population of the country for many centuries has greatly modified the natural vegetation cover, yet MASSART has been able to discover and describe a very large number of associations of representative composition, in fact, nearly all that are to be found in western Europe. The chief open associations are found on rocks and on moving dunes, and natural closed associations are represented by heaths, fixed dunes, pans, and bogs. In this part of the volume there are many text figures which illustrate the modification of plants when exposed to diverse conditions. The forests and meadows, as well as the farms and roadsides, are considered under the head of associations modified by human culture. The final chapter considers in detail the various geobotanic districts of Belgium.

---

[6] MASSART, J., Esquisse de la géographie botanique de la Belgique. Rec. Inst. Bot. Léo Errera, tome supplémentaire VII bis. pp. 332. *figs. 99.* With annex containing 216 simple phototypes, 246 stereoscopic phototypes, 9 maps, and 2 diagrams. Brussels. 1910.

The country is relatively poor in glacial relicts, a few being found in the more elevated limestone areas. There is but one endemic seed plant in the country, *Bromus arduennensis*. This work, like others by the same author, is profusely illustrated by remarkable photographs. It is not too much to say that MASSART is the best of ecological photographers.—H. C. COWLES.

The Lower Cretaceous flora

A volume of the Maryland Geological Survey just issued (1911) contains what is perhaps the most complete systematic account, as yet, of the vascular flora of the Lower Cretaceous. The author, EDWARD W. BERRY, has prepared what is in effect a "manual of botany" for the Lower Cretaceous. To traverse what may be regarded as the rubbish of descriptions from all sorts of "impressions," and to obtain from it something of order, is an attempt that deserves commendation, however much opinion may vary as to the result. We have now before us, in convenient form (pp. 295) and illustrated by 76 plates, this most interesting flora as the paleobotanist, who is at the same time a geologist, looks at it.

In the Maryland deposits of the Lower Cretaceous, BERRY has recognized 145 species in 58 genera, and some appreciation of the vastly greater number of recorded species may be obtained from the long lists of synonyms that appear under many species. The only modern generic names in the list are *Selaginella*, *Equisetum*, *Pinus*, *Populus*, and *Sassafras*, though of course numerous names imply resemblances to modern genera. The pteridophytes include 47 of the species, and 44 of these are thought to belong to the Filicales, the other 3 being one species of *Selaginella* and two species of *Equisetum*. The 3 new genera of Filicales proposed are *Knowltonella* (Matoniaceae?), *Dicksoniopsis*, and *Dryopterites*.

The gymnosperms aggregate 63 species, 33 belonging to Bennettitales and 29 to Coniferales, the remaining one being a *Baiera* (Ginkgoales). Among the Bennettitales, *Ctenopsis* and *Dichotozamites* are proposed as new genera, the latter founded upon forms heretofore referred to *Sequoia*. The angiosperms are represented by 35 species, 3 of which (in 3 genera) are monocotyledons, and among these *Alismaphyllum* is a new genus. The 32 species (14 genera) of dicotyledons include *Nelumbites* as a new genus.

In another part of the volume, BERRY summarizes the Lower Cretaceous floras of the world (53 pp.), listing the recorded species in the various countries.

The volume should be very useful to that increasing number of botanists who are becoming interested in paleobotany, for the scattered and chaotic material of this period has been sifted and brought together in more available form.—J. M. C.

Phylogeny of plants

In 1907 LOTSY began the publication of his lectures on the phylogeny of plants, for the use of students of taxonomy. The first volume[7] contained over

---

[7] See BOT. GAZ. **43**:421. 1907.